

Department of Energy

§ 431.42

For continuous rated machines, the temperature test shall continue until there is 1 °C or less change in temperature rise over a 30-minute time period.

(iv) Page 47, at the top of 10.2 Form B, immediately after the line that reads "Rated Load Heat Run Stator Winding Resistance Between Terminals," the following additional line applies:

Temperature for Resistance Correction (t_r) = °C (See 6.4.3.2).

(v) Page 47, at the bottom of 10.2 Form B, after the first sentence to footnote t_r , the following additional sentence applies:

The values for t_s and t_r shall be based on the same method of temperature measurement, selected from the four methods in subclause 8.3.

(vi) Page 47, at the bottom of 10.2 Form B, below the footnotes and above "Summary of Characteristics," the following additional note applies:

NOTE: The temperature for resistance correction (t_r) is equal to $[(4) - (5) + 25 \text{ °C}]$.

(vii) Page 48, item (22), the torque constants "k = 9.549 for torque, in N·m" and "k = 7.043 for torque, in lbf·ft" do not apply. Instead, the following applies:

"k₂ = 9.549 for torque, in N·m" and "k₂ = 7.043 for torque, in lbf·ft."

(viii) Page 48, at the end of item (27), the following additional reference applies:

"See 6.4.3.2".

(ix) Page 48, item (29), "See 4.3.2.2, Eq. 4," does not apply. Instead the following applies:

Is equal to $(10) \cdot [k_1 + (4) - (5) + 25 \text{ °C}] / [k_1 + (7)]$, see 6.4.3.3".

3. Amendments to test procedures.

Any revision to IEEE Std 112-1996 Test Method B with correction notice of January 20, 1998, to NEMA Standards Publication MG1-1993 with Revisions 1 through 4, or to CSA Standard C390-93 Test Method (I), subsequent to promulgation of this appendix A, shall not be effective for purposes of test procedures required under part 431 and this appendix A, unless and until part 431 and this appendix A are amended.

Subpart C—Energy Conservation Standards

§ 431.41 Purpose and scope.

This subpart contains energy conservation standards for certain types of covered equipment pursuant to Part C—Certain Industrial Equipment, Energy Policy and Conservation Act, as amended (42 U.S.C. 6211 *et seq.*).

§ 431.42 Energy conservation standards and effective dates.

(a) Each electric motor manufactured (alone or as a component of another piece of equipment) after October 24, 1997, or in the case of an electric motor which requires listing or certification by a nationally recognized safety testing laboratory, after October 24, 1999, shall have a nominal full load efficiency of not less than the following:

Motor Horsepower/Standard Kilowatt Equivalent	Nominal Full Load Efficiency					
	Open Motors (Number of poles)			Enclosed Motors (Number of poles)		
	6	4	2	6	4	2
1/75	80.0	82.5	80.0	82.5	75.5
1.5/1.1	84.0	84.0	82.5	85.5	84.0	82.5
2/1.5	85.5	84.0	84.0	86.5	84.0	84.0
3/2.2	86.5	86.5	84.0	87.5	87.5	85.5
5/3.7	87.5	87.5	85.5	87.5	87.5	87.5
7.5/5.5	88.5	88.5	87.5	89.5	89.5	88.5
10/7.5	90.2	89.5	88.5	89.5	89.5	89.5
15/11	90.2	91.0	89.5	90.2	91.0	90.2
20/15	91.0	91.0	90.2	90.2	91.0	90.2
25/18.5	91.7	91.7	91.0	91.7	92.4	91.0
30/22	92.4	92.4	91.0	91.7	92.4	91.0
40/30	93.0	93.0	91.7	93.0	93.0	91.7
50/37	93.0	93.0	92.4	93.0	93.0	92.4
60/45	93.6	93.6	93.0	93.6	93.6	93.0
75/55	93.6	94.1	93.0	93.6	94.1	93.0
100/75	94.1	94.1	93.0	94.1	94.5	93.6
125/90	94.1	94.5	93.6	94.1	94.5	94.5
150/110	94.5	95.0	93.6	95.0	95.0	94.5
200/150	94.5	95.0	94.5	95.0	95.0	95.0